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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Jay Darrell Gillespie

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EXAMINER

STEELE, JENNIFER A

ART UNIT

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1771

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/921,323	Applicant(s) GILLESPIE ET AL.	
	Examiner Jennifer Steele	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-10,20,29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-10,20 and 29-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Applicants amended claim 1 to add the limitation of “melting two or more polypropylene polymer components” but follow this limitation with a broader limitation previously presented as “separately directing the two or more molten polymer components”. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by “such as” and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the broad recitation “separately directing the two or more molten polymer components”, and the claim also recites “melting two or more polypropylene polymer components” which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
2. Claim 1-10, 29 and 30 rejected under 35 U.S.C. 103(a) as being obvious over Hills (US 5162074) in view of Geus et al. (US 5,814,349) and in further view of Mleziva (US 6,410,138) and Handbook of Fiber Chemistry, 3rd edition. Applicants amended claims to change the adjective polymeric to the noun polymer. The term polymeric is an adjective that means of, relating to, or consisting of a polymer. Therefore the change from polymeric to polymer does not amend the claims to introduce a new limitation. The previous Office Action rejection of 3/6/2007 is maintained.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

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unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 1-10, 29 and 30 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2, 4-6, 8, 10-13 and 15 of Taylor U.S. Patent No. 6,737,009 in view of Mleziva (US 6,410,138). The previous office action of 3/6/2007 is maintained.

Response to Arguments

4. Applicant's arguments filed 7/10/2007 have been fully considered but they are not persuasive. Applicants amended claims to narrow claim 1 limitation that the two or more polymeric components are “two or more polypropylene polymer components” but continue the “two or more molten polymer components flow”. This narrow limitation followed by a broad limitation is objected to as stated in paragraph 1 of this office action.

5. Applicants amended claims to change the word polymeric to polymer which does not introduce an additional claim limitation and therefore the previous office action 35 USC 103(a) rejection is maintained.

6. Applicants argue that the reference to the Handbook of Fiber Chemistry has a 2006 copyright date which is after the applicant's priority date. The Handbook of Fiber Chemistry 2nd edition was published by New York Marcel Dekker Inc., 1998. The copyright cited in the previous office action was to the 3rd edition with a copyright of 2006. The information relied upon in the office action was published in the earlier 2nd edition dated 1998 and the date of this publication would be considered prior art.

7. Applicants argue that it would not have been obvious or evident that the reclaimed polypropylene can be successfully incorporated at such a high level in the spunbond process. Examiner presented in the previous rejection that the melt spinning process serves to change the properties of the polypropylene so the reclaim polypropylene would have different properties than virgin polypropylene. The polypropylene properties associated with the properties of applicant's reclaimed polypropylene are equated with those properties that would be from a different polymer. As such, the combination of the virgin polypropylene and reclaim polypropylene are equated with a bicomponent filament produced of differing polymers of differing properties. As Hills, Geus and Mleziva teach processes for producing spunbonded nonwovens of bicomponent filaments wherein the filaments are of two differing polymers, Examiner equates the reclaim polypropylene and the virgin polypropylene to be two differing polymers. The claims as written do not describe or limit two or more

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polymer components in such as way as to distinguish the components from prior art as referenced by Hills, Gues, Mleziva. Therefore one of ordinary skill in the art could have substituted one known element for another and the results of the substitution would have been predictable. The burden is on the applicant to show that a reclaim polypropylene polymer has substantially different properties than another polymer that can be formed into a bicomponent filament in a melt spinning process.

8. Applicants argue that the specific sequence of process steps disclosed and described in the applicant's claims would not have been obvious. The process steps are taught in Hills, Gues and Mleziva and therefore provide process knowledge that one of ordinary skill in the art would have recognized that applying the known techniques would have yielded predictable results. The burden of proof is on the applicant to show that unexpected results were obtained by the specific sequence of process steps.

9. Applicants argue that Mleziva teaches polypropylene in one component and polyethylene in the other component and are of two different polymer compositions. As cited above, the teaching in the Handbook of Fiber properties indicates that the properties of polypropylene are changed after melt spinning and therefore the reclaim polypropylene has different properties than the virgin polypropylene and therefore the two polypropylenes behave differently as would two different polymer components.

10. Applicants argue that Mleziva only specifies using reclaim polymer up to 20% by weight of the filament. The claims specify a reclaim polymer at least 25% by weight of the filament. As cited above, the reclaim polypropylene is equated with a different polymer than virgin polypropylene and there is no specific citing that reclaim

polypropylene is distinguished from any other type of polymer. Mleziva is cited for using a reclaim polymer is known in the art and not specifically cited for the percentage of reclaim that can be used. The specific properties of the reclaim polypropylene are not cited and therefore there is no evidence that the properties of the reclaim polypropylene of the current application distinguish it from a polymer as taught in the prior art as referenced in the Office Action rejection of 3/6/2007 and therefore one of ordinary skill in the art would have recognized that the results of the combination were predictable.

11. Applicants argue that the reclaimed polypropylene is present in the core of the sheath core bicomponent filament. In Mleziva, the reclaim polymer is present in the sheath. Applicant refers to Mleziva's requirement for a crimp enhancement additive in the sheath with the reclaim polymer and that the crimp enhancement additive allows for blending in reclaim polymer with the polymer component B that forms the sheath. Applicant states that persons of ordinary skill in the art would not have a reason or motivation to change the location of where the reclaimed polypropylene is placed. As noted in the previous Office Action of 3/6/2007, Hills teaches polypropylene as a sheath and core polymer and teaches melt flow index differentials of 8 and melt temperature differentials of 3 °C (Table I) but does not teach utilizing a reclaim polypropylene as one polymer components. Office Action rejection is based on motivation to combine the features taught in Hills, Geus, Mleziva and the Handbook of Fiber Properties. With respect to Applicant's arguments that there is no suggestion of motivation to combine, the rationale to modify or combine the prior art does not have to be expressly stated in the prior art; the rationale may be expressly or impliedly contained in the prior art or it

may be reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Steele whose telephone number is (571) 272-7115. The examiner can normally be reached on Office Hours Mon-Fri 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. S./

/Elizabeth M. Cole/
Primary Examiner, Art Unit 1771

9/15/2007